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Editorial

The Report on the Survey of Illnesses Amongst Unemployed of the City of Winnipeg

The first part of this report was published in the May number of the *Review*, and the second part is printed in the present number. In many ways it is an unusual contribution to the subject of medical economics. The first important point is that records were available as to the illnesses among over 30,000 people in the City of Winnipeg for a period of twelve months—the actual average number of persons on relief during this period was 33,731. Among this group all forms of illness and injury of sufficient importance to require medical attention, are recorded in this report. The only likely exceptions to this are (1) Dental cases; (2) Certain cases for which treatment may have been refused because the condition present was not considered to be dangerous to life or likely to cause permanent disability (the Winnipeg plan was never intended to be a complete medical service and never has been); (3) refractions; (4) accidents as the result of industrial hazards; (5) a small proportion of illness which may have required medical attention for which no report may have been filed.

In the first part of this report the survey officer stated that as soon as a doctor reached his quota of $100.00 in one month, he continued to do the work but probably did not send in any report. It is likely that too much emphasis was laid upon this factor, as there were many doctors who reported two, three and even four hundred dollars worth of work in one month.

Although these people concerned in this report were all on relief they represent many occupational groups and various racial types in the City. From this group then could be recorded the incidence of illness during one year with an accuracy which probably has not been approached in any other survey, certainly not in Canada. The report of the Committee on Economics of the Canadian Medical Association which was presented at the Annual Meeting of the Canadian Medical Association, Calgary, June 1934, was made up largely of a summary of information contained in reports about conditions in other countries and were available in already existing publications. None of these reports could of course be applied to conditions in Canada. Until this present report was made from Winnipeg, no actual figures as to the cost of medical services have been available anywhere in Canada and this group is entirely confined to a city. The references in the report of the Committee of the Canadian Medical Association with regard to Canadian conditions refer to generalizations only.

As pointed out in the report, the cause of illness emphasises the importance of certain diseases altogether different from those that are prominent in tables of mortality.

Another interesting feature of the purely medical aspects of the report are the relations between the pathologist's report on tissues removed at operation and the pre-operative diagnosis. In all except one or two cases the presumption of definite pathology appears to have been confirmed.

With regard to the mortality statistics among this group, it is interesting to note that the maternal mortality rate is 4.4%, whereas that for the rest of Winnipeg was 6.2%; the general death rate per 1,000 population on relief was 2.4% and that per 1,000 for the City of Winnipeg 6.66%. That is to say the mortality rates among the unemployed in the City of Winnipeg was lower than that of the general population of the City by quite a definite percentage.

The second part of the report published in this number of the *Review* deals largely with the costs of medical services. In this connection it is important to emphasise the fact that not only are the schedule of fees for medical men only a proportion of the usual fee but also that as many men do more than $100.00 worth of work in a month, that the amount actually paid to the medical men is by this method much lower than what it set

out in the schedule of fees, e.g., if a man did eight major operations in a month the schedule of fees might call for payment at the rate of $25.00 per case, or $200.00 in all, but as each doctor is limited to payment of $100.00 for the month these operations would actually be done at the rate of $12.50 each. The fact that a few medical men are allowed to collect more than $100.00 a month does not offset this general conclusion. It is probably a safe estimate that the amount of money paid for medical services represents about one-third to one-half of the usual fees.

It is interesting to examine the costs of medical care for specific illnesses, e.g., there were 199 cases of pneumonia which necessitated 1,256 calls, the total doctors' fees charged for these cases was $1,013.00. This works out at a total cost for medical fees per case of pneumonia of $5.09.

In comparing the part that is played by medical fees and hospital expenses in the cost of illness, it is important to notice that the total fees paid to doctors for all cases was $86,913.50, while the total hospital charges actually paid by the City and Province were $58,093.51. When the high cost of medical services is discussed by laymen the fact is often overlooked that a large share of the total cost is due to the expense of hospitalization. Many cases requiring hospitalization now cost more for treatment than they did thirty-five years ago, for the simple reason that at that time many of them died after a short illness. The advance in the scientific knowledge of the cause and treatment of such diseases as diphtheria, appendicitis, diabetes, etc., has reduced the mortality very definitely. But the treatment required and the hospitalization which is necessary for these cases, cost more than a short illness followed by a funeral, especially if the funeral expenses are not included in the estimates.

In considering the value of this report the introduction of the second part in this number of the *Review* is of great importance. In this introduction the survey officer explains the difference between the figures which he allows for the cost of medical services and the amount actually paid by the City. It is unfortunate that these totals could not have been made to correspond more closely. The figures which he includes for extra charges in hospital (not paid for) may be questioned by hospital Superintendents as they are apparently only an estimate.

Making allowance for these possible disputable points, this survey represents a study of the incidence of illness and the cost of medical care which is unique in this country. It must be again emphasised that the medical fees represent only a proportion of the normal fees for these services.

C. W. MacC.

DR. HERBERT SECORD

AN APPRECIATION

The death of Dr. Herbert Secord on May 13th was a distinct loss to organized medicine in Manitoba. His fine sense of public duty and his zeal to advance the honour and dignity of his profession led him to undertake many onerous duties, and the appreciation of his fellows showed itself in his election to many positions of trust:—President of the Winnipeg Medical Society, Vice-President Manitoba Medical Association, Treasurer and President of the College of Physicians and Surgeons of Manitoba, member of the Medical Council of Canada. In all these positions he gave himself to the full. As a member of the joint committee of the College of Physicians and Surgeons and the Manitoba Medical Association to consider Health Insurance he prepared and submitted a complete and well worked out scheme of health insurance applicable to this province.

During the Great War he served three years with the 11th Field Ambulance, gaining the rank of Major and winning the Military Cross. For several years after his return he was Commanding Officer of the Canadian Officers Training Corps in Manitoba University.

In professional life he was highly regarded as a surgeon, and for several years he was a Lecturer in Clinical Surgery in the University of Manitoba.

He is survived by his widow, sister of his lifelong friend, Dr. W. G. Campbell, and his only son, Campbell.

The whole community is the poorer through the passing of a man of high ideals, professional skill, and marked devotion to duty.

Survey of Illness Amongst Unemployed in the City of Winnipeg

March 1st, 1934, to February 28th, 1935 inclusive

Conducted by

THE DEPARTMENT OF HEALTH AND PUBLIC WELFARE, PROVINCE OF MANITOBA

and

THE COMMITTEE ON SOCIOLOGY OF THE MANITOBA MEDICAL ASSOCIATION

with the co-operation of the

WINNIPEG UNEMPLOYMENT RELIEF COMMISSION

Survey Officer: M. R. ELLIOTT, M.D. (Man.), D.P.H. (Tor.)

PART II

This paper presents a report of the distribution of cost of medical attendance to the unemployed, in the City of Winnipeg, for one year. It is not to be regarded as an accountant's balance sheet of actual costs, but rather an attempt to show

how the money was distributed according to specific illness. The statistics were compiled from a survey of the physicians' reports.

All doctors on the panel were obliged to report within 24 hours on specified forms every case of illness treated by them, to be followed at frequent intervals by a progress or discharge report. At the relief office a file was kept for each doctor, and within this file an attempt was made to keep each patient's report; theoretically, a careful perusal of these reports should have provided an accurate account of all illnesses and attendances for the year. It was found that such a condition did not exist. It was also required of the attending physicians that at the end of each month they send an itemized list of all patients, with the nature of illness, the form of attendance given, whether home or office visit, medical or surgical treatment, together with an itemized statement of all charges eligible for collection from the city. The monthly statements from the doctors, upon which they collected their fees, presented a more complete picture of the amount of medical attendance than did the detailed medical reports. In order to gain a comprehensive view, both reports had to be studied. Professional services extending over several weeks or even months would frequently be served by only one Medical Report form. This involved much extra labor and also increased the possible percentage of error.

Classification of illness was made under three main divisions, viz., Obstetrical, Medical and Surgical. The various diseases or groups of diseases which are closely related were tabulated under separate headings. Thus, the completed statistics present as accurate a picture as is possible of the amount of illness, its cause, the number and nature of calls made, the operative procedures necessary and the cost to the city. It should be borne in mind that the schedule of fees was not intended to compensate the doctor for professional skill or knowledge, but merely to reimburse him for actual expenditure and overhead outlay necessary for the proper care of these patients. The present figures can not be accepted as being an estimate of the cost of illness under normal conditions.

It will be noticed that some discrepancy exists between the final figures as quoted herein and those published by the city. Several factors enter into this report which may throw light on the apparent difference. In the first place, owing to the fact that this report covers the first months of operation of the scheme when many doctors were unfamiliar with the requirements, records of attendance were not as thorough as in later months. While every effort was made to have these records as complete as possible, lapses did occur, and the writer observed on more than one instance a doctor fill in from memory the reports on twenty or more cases. As the figures were taken solely from these reports, the omission of the nature of professional services, for which money was actually paid out, was possible.

Secondly, in the matter of classification of illness a purely arbitrary system has been followed. Many so-called "Medical Cases," later requiring surgery, may be found listed among Surgical Cases. Similarly, many "Surgical Cases," requiring no operative measures, are listed among Medical Cases. The classification of cases at the relief office, made sometimes by non-medical men, and based solely upon the fees charged by doctors, doubtless accounts for a considerable variation in the figures.

Thirdly, our interest was mainly concerned with the nature of the illnesses, their frequency, and the amount of medical attention necessary. The fees charged were incidental and based entirely upon the physician's report of such services. The figures compiled by the City accountants were taken directly from records of monies paid out and their concern was chiefly financial. Their statement presents a more accurate picture of monetary outlay.

Bearing in mind these facts, this report presents an accurate picture of all illnesses, reported in full to the relief office, and on this basis should be valuable from the following viewpoints:—

1. It presents a picture of the Incidence of Disease.
2. It outlines clearly the amount of medical attention given to each illness or disease.
3. It shows the cost of such medical attendance per specific disease or group of diseases, and the proportionate part which each bears to the total cost.
4. It forms a basis for comparison with future statistical studies of a like nature.

Obstetrical Cases

Number of Confinements at Home	78
Number of Confinements at Hospital	615
Total Number of Confinements	693
Number of Abortions at Home	72
Number of Abortions at Hospital	65
Total Number of Abortions	137
Total number of cases for the year	830
Total Cost of Cases at Home	$2,756.50
Average Cost of Home Case	18.38
Hospital Cases	
Doctors' Fees	$ 6,832.50
Hospital Costs paid by City	13,792.25
Hospital Costs paid by Province	2,768.80
Total Costs	23,393.55
Average Cost Hospital Case Paid	$34.39
Cost of Extra Services rendered in Hospital but not paid for (Including charges for case room Pathological Examination, etc.)	$2,782.00
Average Cost Hospital Case if Extra Added	$38.48
Total number of days spent in Hospital	6,922
Average days spent in Hospital	10.2
Average (hosp. costs only) paid by City	$20.28
Average (hosp. costs only) paid by Province	4.06
Average cost of extras not paid for	4.09
Average Total Hospital Costs	28.43
% of Maternity Cases at Home	10.9
% of Abortions at Home	53.3
% of Abortions to Total Obstetrical Cases	18.0
Birth rate per 1,000 among Relief Cases	19.9
Maternal Mortality Rate	4.4
Maternal Mortality Rate Rest of Winnipeg (1934) (Provisional Figure)	6.2

MEDICAL CASES

DISEASE	No. of Cases	No. of Days' Illness	Calls Made by Doctors: Home	Hospital	Off.	Total Doctors' Fees Charged	No. Cases in Hospital	No. Days in Hospital	Hospital Costs Paid by City	Total Costs Hospital Plus Doctor	Total Hospital Extra Charges (Not Paid)	Total Costs Including Extras
A.—TOTAL RESPIRATORY DISEASES	2,957	30,108	4,836	1,136	2,513	$9,185.30	150	2,097	$3,145.50	$12,330.80	$496.00	$12,826.80
1. Influenza and Grippe	592	4,923	1,131	126	178	2,006.60	23	216	324.00	2,330.00	57.00	2,390.00
2. Pneumonia	199	2,368	639	582	35	1,013.00	78	1,070	1,605.00	2,618.00	252.00	2,870.00
3. Pleurisy	82	1,733	140	59	92	329.25	9	157	235.50	564.75	87.00	651.75
4. Diseases of the Pharynx	1,008	6,583	1,234	127	651	2,620.50	11	76	114.00	2,734.50	22.00	2,756.50
(a) Tonsillitis	472	4,268	853	69	226	1,628.25				1,628.25		1,628.25
(b) Quinsy	53	445	110	21	18	202.75	11	76	114.00	316.75	22.00	338.75
(c) Sore Throat	291	900	148	6	324	494.50				494.50		494.50
(d) Other Dis. of Pharynx	92	970	123	31	83	295.00				295.00		295.00
5. Diseases of the Larynx	98	1,166	115	4	110	281.20	6	134	201.00	482.20	8.00	490.20
(a) Laryngitis	74	786	91	4	95	218.20	6	134	201.00	419.20	8.00	427.20
(b) Croup	24	380	24		15	63.00				63.00		63.00
6. Hay Fever and Asthma	48	1,024	74	31	55	144.00	3	44	66.00	210.00	15.00	225.00
7. Pulmonary Tuberculosis	39	—	73	55	33	178.00	2	40	60.00	238.00	6.00	244.00
8. Other Dis. of Resp. System (Bronch. Colds, Septic, etc.)	891	12,408	980	152	1,359	2,612.75	18	360	540.00	3,152.75	48.00	3,200.75
B.—EPIDEMIC, ENDEMIC & INFECT.	882	10,606	1,201	600	195	2,643.75	40	1,192	2,988.00	5,631.75	102.00	5,733.75
1. Typhoid Fever	2	110	7	9	9	26.50	1	20	30.00	56.50	5.00	61.50
2. Measles	564	5,600	851	41	20	1,355.25				1,355.25		1,355.25
3. Scarlet Fever	63	2,030	85	34	9	160.25				160.25		160.25
4. Whooping Cough	49	1,220	79	11	26	160.75				160.75		160.75
5. Diphtheria	50	579	7	28	11	145.50				145.50		145.50
6. Chicken Pox	62	731	97	—	16	165.00				165.00		165.00
7. Tuberculosis (Non-Pulm.)	17	—	41	40	16	167.00	4	167	250.50	417.50	97.00	514.50
8. Venereal Diseases	51	—	8	437	69	396.50	35	1,805	2,707.50	3,104.00		3,104.00
9. Other Diseases of this Group	24	336	26	—	10	67.00				67.00		67.00
C.—GENERAL DISEASES	359	8,166	511	582	795	2,257.50	48	1,729	2,593.50	4,851.00	378.00	5,229.00
1. Cancer (all forms)	39	—	219	180	29	581.25	18	371	1,306.50	1,887.75	159.00	2,046.75
2. Rheumatism	133	2,733	213	91	197	587.00	10	283	424.50	1,011.50	20.00	1,031.50
3. Diabetes	37	1,285	30	124	220	389.50	11	315	472.50	862.00	171.00	1,033.00
4. Goitre	103	2,278	85	165	230	445.25	8	222	333.00	778.25	25.00	803.25
5. Other General Diseases	47	1,870	24	22	119	254.50	1	38	57.00	311.50	3.00	314.00
D.—DISEASES OF NERVOUS SYSTEM	656	9,463	547	470	1,183	2,340.50	54	1,420	2,128.50	4,469.00	248.00	4,717.00
1. Cerebral Haem. & Apoplexy	19	—	56	86	16	190.00	5	450	673.50	863.50	19.00	882.50
2. Paralysis	9	237	17	—	29	54.50				54.50		54.50
3. Epilepsy	34	—	22	26	138	156.50	5	90	135.00	291.50	29.00	320.50
4. Chorea	13	—	17	7	25	49.50	2	20	30.00	79.50	4.00	83.50
5. Neuralgia	136	1,720	70	24	212	301.00	11	288	432.00	733.00	77.00	810.00
6. Neuritis and Sciatica	186	3,422	154	77	393	641.00	9	81	121.50	762.50	37.00	799.50
7. Headache	67	485	34	7	82	141.50	2	10	15.00	156.50	2.00	158.50
8. Mental Disorders (Neurosis)	148	2,899	100	115	313	445.00	14	382	573.00	1,018.00	40.00	1,058.00
9. Other Nervous Diseases	44	700	77	128	75	361.50	6	99	148.50	510.00	40.00	

E.—DIS. OF EYE AND ADNEXA	229	3,132	112	126	494	854.75	12	155	232.50	1,087.25	13.00	1,100.25
1. Blepharitis	19	452	44	24	20	107.50						
2. Trachoma	2	90	—	—	24	27.50						
3. Epiphora	1	30	—	—	3	3.00						
4. Optic Neuritis	4	80	—	15	11	28.00						
5. Glaucoma	5	65	1	—	13	50.50						
6. Corneal Ulcer	16	484	—	47	84	151.25						
7. Chalazion	14	126	—	—	27	30.50						
8. Iritis	9	122	16	9	26	59.00						
9. Dacrocystitis	2	30	—	4	9	17.00						
10. Keratitis	5	140	—	—	34	37.00						
11. Cataract	6	500	—	—	21	19.00						
12. Conjunctivitis	146	1,013	51	27	222	324.50						
F.—DIS. OF EAR AND MASTOID	439	3,918	556	163	619	1,604.25	30	412	618.00	2,222.25	125.00	2,347.25
1. Otitis Media	376	3,469	525	158	481	1,407.50	28	397	595.50	2,003.00	115.00	2,118.00
2. Mastoiditis	15	249	29	5	30	85.25	2	15	22.50	107.75	10.00	117.75
3. Other Diseases of the Ear	48	200	2	—	108	111.50				111.50		111.50
G.—DIS. OF CIRCULATORY SYSTEM	767	10,181	1,136	554	1,653	3,820.00	80	1,221	1,831.50	5,650.50	243.00	5,893.50
1. Diseases of the Heart	174	—	627	325	393	1,535.75	36	686	1,029.00	2,564.75	122.00	2,686.75
2. Arteriosclerosis	9	—	22	—	23	57.00				57.00		57.00
3. Hemorrhoid	78	1,175	46	29	156	249.75	6	42	63.00	312.75	12.00	324.00
4. Varicose Veins	55	1,370	80	13	182	363.50	3	28	42.00	405.50	10.00	415.50
5. High Blood Pressure	91	—	120	47	265	484.25	5	72	108.00	592.25	7.00	599.00
6. Adenitis	127	1,573	126	74	154	447.75	15	155	232.50	680.25	21.00	701.25
7. Other Dis. of Circ. System (including anaemia)	233	6,063	115	66	480	682.00	15	238	357.00	1,039.00	71.00	1,110.00
H.—DIS. & DISORDERS of DIGEST. SYS.	1,797	19,105	1,841	955	2,233	5,807.80	139	1,842	3,974.20	9,782.00	766.00	10,548.00
1. Ulcers of Stomach & Duod.	165	4,520	166	149	356	786.75	22	286	429.00	1,215.75	170.00	1,385.75
2. Indigestion and Gastritis	486	3,934	454	165	459	1,255.60	24	380	570.00	1,825.60	136.00	1,961.60
3. Stomach Trouble (Unqualified)	156	1,369	79	8	228	355.50			1,208.70	1,564.20		1,564.20
4. Diarrhoea	153	1,232	153	113	110	441.25	20	264	396.00	837.25	182.00	1,019.25
5. Appendicitis	191	1,384	253	65	159	586.00	16	131	196.50	782.50	21.00	803.50
6. Hernia	74	—	40	3	89	156.25	2	10	15.00	171.25	3.00	174.25
7. Intestinal Disorders (Colitis, Constip., etc.)	277	2,839	215	85	340	738.75	4	35	55.00	793.75	8.00	801.75
8. Biliary Calculi	64	878	153	78	45	317.00						
9. Cholecystitis	130	1,622	196	141	198	588.25	30	460	690.00	1,595.25	224.00	1,819.25
10. Jaundice	18	219	18	16	20	66.00				66.00		66.00
11. Other Disorders of Liver	6	300	56	50	19	166.00	4	106	159.00	325.00	2.00	327.00
12. Malnutrition	27	—	8	—	31	46.00				46.00		46.00
13. Other Dis. of Digest. System	50	1,078	50	182	180	304.45	17	170	255.00	559.45	20.00	579.45
I.—DISEASES OF TEETH & GUMS	131	1,122	104	69	145	366.25	4	84	126.00	492.25	6.00	498.25
J.—DISEASES OF KIDNEY & ADNEXA	371	6,242	367	359	696	1,527.95	46	945	1,417.50	2,945.45	198.00	3,043.45
1. Nephritis	101	1,597	80	166	167	420.45	18	686	1,029.00	1,449.45	110.00	1,559.45
2. Cystitis & Bladder Trouble	134	2,050	49	60	316	403.50	10	107	160.50	564.00	22.00	586.00
3. Other Diseases in this Group	136	2,595	238	133	213	704.00	18	152	228.00	932.00	66.00	998.00

DISEASE	No. of Cases	No. of Days' Illness	Calls Made by Doctors			Total Doctors' Fees Charged	No. Cases in Hospital	No. Days in Hospital	Hospital Costs Paid by City	Total Costs Hospital Plus Doctor	Total Hospital Extra Charges (Not Paid)	Total Costs Including Extras
			Home	Hospital	Off.							
K.—NON-VENEREAL DIS. OF G. U. SYS.	927	20,088	774	643	2,049	3,823.75	88	1,231	1,846.50	5,670.25	310.50	5,980.75
1. Diseases of Male Organs	84	914	50	13	142	251.25	3	21	31.50	282.75	4.00	286.75
2. Dis. of Female Genital Organs	428	10,495	306	422	1,209	1,950.50	46	638	957.00	2,907.50	97.50	3,005.00
(a) Chronic Salpingitis	61	1,666	33	26	150	211.50						
(b) Endometritis	60	1,565	32	29	253	315.50						
(c) Acute Salpingitis	52	891	71	173	68	281.00						
(d) Prolapsis Uteri	11	260	5	—	19	26.50						
(e) Vaginitis	36	790	7	—	71	156.50						
(f) Ovaritis	16	276	14	—	30	49.00						
(g) Pelvic Inflammation	74	1,658	87	97	146	314.00						
(h) Fibroids	24	605	13	60	41	86.00						
(i) Ovarian Cyst	19	400	11	5	88	86.00						
(j) Endocervicitis	75	2,390	31	22	343	424.50						
3. Menstruation	308	5,405	371	194	472	1,318.25	39	572	858.00	2,176.25	209.00	2,385.25
4. Menopause	107	3,274	47	14	236	303.75						
L.—PUERPERAL STATE	89	1,250	185	191	61	502.25	2	41	61.50	563.75	10.00	573.75
M.—TOXEMIA OF PREGNANCY	83	849	86	78	89	240.50	8	122	183.00	423.50	5.00	428.50
N.—DISEASES OF SKIN & CELLULAR	1,036	13,489	514	554	2,601	3,652.15	69	1,096	1,793.50	5,445.65	179.00	5,624.65
1. Furunculosis	92	918	41	52	233	255.15						
2. Abscesses and Infection	156	2,434	109	111	415	741.75						
3. Scabies and Itch	73	789	8	3	138	155.75						
4. Impetigo Contagioso	101	1,057	43	38	122	279.50						
5. Other & Unqualified Skin Cond.	614	8,291	373	341	1,693	2,220.00						
O.—DISEASES OF BONE AND ORGANS OF LOCOMOTION	438	6,849	345	266	579	1,260.25	18	335	502.50	1,762.75	98.00	1,860.75
1. Lumbago, Myalgia & Myositis	177	2,822	99	23	242	443.75	1	23	34.50	478.25	11.00	489.25
2. Arthritis	239	3,537	213	123	281	696.25	13	284	426.00	1,122.25	77.00	1,199.25
3. Other Dis. of Bones & Joints	22	490	33	20	56	120.25	4	28	42.00	162.25	10.00	172.25
P.—CONGENITAL MALFORMATION AND INFANCY	102	868	143	566	66	333.00	6	70	105.00	438.00	29.00	467.00
Q.—SENILITY	31	—	37	35	58	133.25				133.25		133.25
R.—EXTERNAL CAUSES	844	9,385	813	366	1,440	3,147.00	42	497	745.50	3,892.50	144.00	4,036.50
1. Poisonings	20	201	46	5	13	78.00	2	17	25.50	193.50	16.00	119.50
2. Minor Injuries	824	9,184	767	361	1,427	3,069.00	40	480	720.00	3,789.00	128.00	3,917.00

S.—NOT OTHERWISE CLASSIFIED	308	2,593	149	39	409	1,232.25	9	74	111.00	1,343.25	36.00	1,379.25
1. Sinusitis	91	1,179	77	21	190	319.25	4	40	60.00	379.25	28.00	407.25
2. Fever of Unknown Cause	6	29	2	3	3	6.00	1	4	6.00	12.00	1.00	13.00
3. Fainting and Dizziness	33	300	29	9	59	92.50	3	15	22.50	115.00	4.00	119.00
4. Nasal Polypi	18	255	5	—	32	50.00				50.00		50.00
5. Empyaema	1	30	—	—	3	3.00				3.00		3.00
6. Non-Malignant Tumors	14	331	14	6	57	121.00	1	15	22.50	143.50	3.00	146.50
7. Ulcers in Nose	5	100	—	—	5	15.00				15.00		15.00
8. Sterility	1	—	—	—	1	1.00				1.00		1.00
9. Gangrene	1	—	2	—	—	3.00				3.00		3.00
10. Narcolepsy	1	30	4	—	1	4.00				4.00		4.00
11. Bursitis	16	324	7	—	31	43.50				43.50		43.50
12. Serum Sickness	2	15	4	—	1	7.00				7.00		7.00
13. Referred for Refraction	93					465.00				465.00		465.00
14. Referred for Examination	21					21.00				21.00		21.00
15. Referred for Cystoscopic	5					81.00				81.00		81.00
	12,446	157,414	14,257	7,752	17,878	44,732.45	845	14,563	24,403.70	69,136.15	3,386.50	72,522.65

SURGICAL CASES

DIAGNOSIS	Cases Not in Hospital		CASES IN HOSPITAL									
	No.	Total Cost	No. Cases	No. Days in Hospital	Total Physician's Fees	Total Extra Service Paid to Doctors	Total Surgeon's Fees Paid by City	Total Hospital Costs Paid by City	Total Cost of Hospital Cases (Paid For)	Extras in Hospital Not Paid For	Total Cost If All Extras Paid For	Total Cost Including Non-Hospital Cases
A.—TOTAL RESPIRATORY DIS.	1	$25.00	1	23	$7.50		$ 25.00	$ 34.50	$ 67.00	$ 13.00	$ 80.00	$ 105.00
1. Empyaema	1	25.00										
2. Bronchoscopy			1	23	7.50		25.00	34.50	67.00	13.00	80.00	
B.—EYE, EAR, NOSE AND THROAT	5	50.00	703	1,385	201.00	$92.50	11,255.00	2,089.50	13,638.00	4,273.00	17,911.00	17,961.00
1. Antrum Disease			6	57	8.00		200.00	85.00	293.00	60.00	353.00	
2. Otitis Media	4	45.00	6	43	10.50		55.00	64.50	130.00	30.00	160.00	
3. Mastoid			17	371		92.50	600.00	571.00	1,263.50	44.00	1,307.50	
4. Eye Operations	1	5.00	14	253	12.50		500.00	377.50	890.00	181.00	1,071.00	
5. Tonsillectomy			660	661	170.00		9,900.00	991.50	11,061.50	3,958.00	15,019.50	
C.—GENERAL DISEASES	1	8.50	35	443	9.25	9.00	1,077.00	664.50	1,765.25	410.00	2,175.25	2,183.75
1. Diabetic Gangrene			2	50			50.00	75.00	125.00	20.00	145.00	
2. Goitre			22	296	1.00	9.00	825.00	444.00	1,218.50	295.00	1,513.50	
3. T. B. Glands and Adenitis	1	8.50	11	97	8.25		202.00	145.50	421.75	95.00	516.75	
D.—CIRCUL. SYS. (HAEMORRHAGE)	1	15.00	15	204	10.50	4.00	230.00	305.50	539.50	176.00	715.50	730.50

DIAGNOSIS	Cases Not in Hospital		CASES IN HOSPITAL									
	No.	Total Cost	No. Cases	No. Days in Hospital	Total Physician's Fees	Total Extra Service Paid to Doctors	Total Surgeon's Fees Paid by City	Total Hospital Costs Paid by City	Total Cost of Hospital Cases (Paid For)	Extras in Hospital Not Paid For	Total Cost If All Extras Paid For	Total Cost Including Non-Hospital Cases
E.—DIGESTIVE SYSTEM			270	3,793	139.55	2.00	10,448.00	5,700.50	16,290.05	3,559.50	19,849.55	19,849.55
1. Gastric Ulcer			7	122			300.00	183.00	483.00	105.00	588.00	
2. Appendicitis			185	2,352	67.25		7,375.00	3,522.00	10,964.25	2,362.00	13,326.25	
3. Rectal Abscess, etc.			10	177	12.55		229.50	265.50	507.55	158.00	665.55	
4. Intussusception			5	27			250.00	40.50	290.50	51.00	341.50	
5. Gall Bladder Disease			31	573	42.75	2.00	1,125.00	867.00	2,036.75	516.00	2,552.75	
6. Bowel Obstruction			5	84	7.50		200.00	131.00	338.50	64.00	402.50	
7. Hernia			25	427	9.50		905.00	645.00	1,559.50	283.50	1,843.00	
8. Cirrhosis of Liver			1	8			25.00	12.00	37.00	10.00	47.00	
9. Ruptured Liver			1	23			38.50	34.50	73.00	10.00	83.00	
F.—GEN-URINARY SYSTEM	1	60.50	20	313	31.50	80.00	715.00	460.00	1,286.50	276.00	1,562.50	1,623.00
1. Nephritic Abscess			2	31	5.00		50.00	47.00	102.00	24.00	126.00	
2. Stone in Bladder			1	15	8.00		25.00	22.50	55.50	10.00	65.50	
3. Urethral Carbuncle			1	3			15.00	4.50	19.50	17.00	36.50	
4. Renal Calculus			1	43			50.00	64.50	114.50	30.00	144.50	
5. Papiloma of Bladder	1	60.50	2	45		70.00	150.00	67.50	287.50	20.00	307.50	
6. T. B. Kidney			2	19			100.00	28.50	128.50	26.00	154.50	
7. Prostate			7	138	16.50	10.00	235.00	197.00	458.50	119.00	577.50	
8. Hydrocele			4	19	2.00		90.00	28.50	120.50	30.00	150.50	
G.—FEMALE GENITAL ORGANS			73	1,145	48.50	22.00	2,560.00	1,714.00	4,344.50	956.50	5,301.00	5,301.00
1. Fibroids and Other Uterine Operations			22	382	14.50	7.00	790.00	538.00	1,349.50	312.50	1,661.00	
2. Pelvic Cellulitis			9	171	1.00		310.00	256.50	567.50	104.00	671.50	
3. Ovarian Cyst			15	198	26.50	15.00	525.00	303.00	869.50	192.00	1,061.50	
4. Salpingitis			12	172			475.00	268.50	743.50	160.00	903.50	
5. Ectopic Pregnancy			11	160	6.50		350.00	255.00	611.50	148.00	759.50	
6. Caesarian Section			2	29			75.00	43.50	118.50	23.00	141.50	
7. Mastitis			1	6			10.00	9.00	19.00		19.00	
8. Perineal Tear			1	27			25.00	40.50	65.50	17.00	82.50	
H.—BONES AND MUSCLES			15	299		53.00	600.00	473.50	1,126.50	218.00	1,344.50	1,344.50
1. Osteo-myelitis			5	107		9.00	225.00	160.50	394.50	80.00	474.50	
2. Bone Tumor			1	15			25.00	22.50	47.50	10.00	57.50	
3. Ruptured Muscle			1	23			25.00	34.50	59.50	30.00	89.50	
4. Club Feet			5	29		4.00	175.00	43.50	222.50	38.00	260.50	
5. T. B. Hip			2	72			125.00	133.00	258.00	10.00	268.00	
6. T. B.			1	53		40.00	25.00	79.50	144.50	50.00	194.50	
I.—NEW GROWTHS			23	265	14.50	117.00	740.00	402.50	1,274.00	332.00	1,606.00	1,606.00
J.—HARE LIP AND CLEFT PALATE			4	61			175.00	91.50	266.50	31.00	297.50	297.50
K.—MINOR INJURIES	11	51.00	12	99	15.50	5.00	79.50	148.50	248.50	30.00	278.50	329.50

L.—FRACTURES	72	1,306.50	48	782	12.00	61.00	1,248.00	1,173.00	2,494.00	476.00	2,970.00	4,276.50
M.—MINOR OPERATIONS	37	344.75	51	232	27.00	6.00	706.50	348.00	1,087.50	247.50	1,335.00	1,679.75
N.—SPRAINS	1	3.50	3	16		5.00	30.00	24.00	59.00	5.00	64.00	67.50
O.—DISLOCATIONS	5	53.00	1	3		13.00	50.00	4.50	67.50		67.50	120.50
	135	1,917.75	1,274	9,063	516.80	469.50	29,939.00	13,634.00	44,554.30	11,003.50	55,557.80	57,475.55

GRAND SUMMARY

	Medical Cases	Surgical Cases	Obstet. Cases	Total
1. No of cases treated at home	11,599	135	150	11,884
2. No of cases treated in hospital	845	1,274	680	2,799
3. Total number of cases	12,444	1,409	830	14,683
4. Total cost of home cases	$39,977.50	$ 1,917.75	$ 2,756.50	$ 44,651.75
5. Total Doctors' fees for Cases treated in Hospital	4,485.00	30,944.25	6,832.50	42,261.75
*6. Total Fees charged by Doctors for all cases	44,462.50	32,862.00	9,589.00	86,913.50
7. Number of days in hospital	15,463	9,222	6,922	31,607
8. Total hospital costs actually paid by City	24,253.30	13,643.50	13,792.25	51,689.05
Total hospital costs actually paid by Province	3,202.20	1,601.13	1,601.13	6,404.46
9. Total actual amount charged (Hospital costs and doctors' fees)	71,918.00	48,106.63	24,982.38	145,007.01
10. Total extra services in hospital (not paid for)	3,485.00	11,003.50	2,782.00	17,270.50
11. Total cost if extra services paid for	75,403.00	59,110.13	27,764.38	162,277.51

*Does not include $4,786.00, cost of payment above quotas, special examinations, consultations, etc. If added, total fees paid would be $91,699.50, and average cost per person $2.72.

1. Average number of persons on relief during the above period	33,731
2. Average cost per person for doctors' fees	$ 2.59
3. Average cost per person for Hospital Services paid by City	$ 1.53
Average cost per person for Hospital Services paid by Province	$ .19
4. Average total cost per person (actually paid)	$ 4.31
5. Average cost per person for extra Hospital Services (not paid)	$ .51
6. Average total cost per person, extra Hospital Services included	$ 4.82
7. Average number of families on relief during the above period	8,368
8. Average cost per family for doctors' fees	$10.42
9. Average cost per family for Hospital Services paid	$ 6.95
10. Average total cost per family—Hospital and Doctors' fees (actually paid)	$17.37
11. Average total cost per family if all extra Hospital Services are included	$19.44
12. Average number of illnesses per family	1.8
13. Average total cost per illness	$10.64
14. Death rate per 1,000 population in receipt of relief	2.4
15. Death rate per 1,000 population in City of Winnipeg	6.66

The College of Physicians and Surgeons of Manitoba

NOTICE IN REFERENCE TO THE CARRYING OF NARCOTICS

The information contained in the following letter received from the Department of Pensions and National Health may be of value to any physician travelling in the United States.

"Dear Sir:

"There have, from time to time, been instances of Canadian physicians encountering considerable difficulty in the United States by reason of their carrying narcotics with them on visits to that country. I do not, for a moment, intend to convey the impression that illicit traffic in narcotics was involved, but the fact remains that it is illegal for narcotics to be taken into the United States except under permit issued by the authorities of that country.

"In a recent instance, the physician concerned encountered real difficulty indeed in relation to narcotics which he had quite legally purchased from a Canadian drug store, but which he took with him on a trip to the southern United States. As a result, the United States Commissioner of Narcotics has written me as follows:

"I think this offers an excellent opportunity for both of us to request our respective medical associations to notify their doctors that if they intend to travel across the border they should not have drugs in their possession. If they are possessed of a medical condition which requires narcotics, they should place themselves in the care of a reputable physician when they reach their destination.

"In accordance with the Commissioner's request, therefore, I am communicating with the respective Registrars, and possibly you might consider it advisable to bring the matter to the attention of your members at some convenient time."

Department of Health and Public Welfare

NEWS ITEMS

MY METHOD IN PUERPERAL INFECTION

The following is an article written on "My Method in Puerperal Infection," which it is thought might be found of interest.

So much has been written on the prevention and treatment of childbed fever that, when the occasional case presents, there may be difficulty in separating the grain of effective means from the chaff of inefficient method.

I have had enthusiasms for new remedies, and felt the regret of their failures in practice. A process of approval and discard has left me a routine, neither new nor novel, but satisfying, which may assist practitioners in constructing a regular method or in amending one already used.

Prevention is highly important, but that part of it falling in the ante-natal period is not sufficiently emphasised and is far too little practised. The patient who reaches labour under-nourished, anaemic, toxaemic or weak from undetected illness is "sepsis liable." Pelvic measurement and occasional urinary examinations are the trivialities of ante-natal care, the real prevention is the wide one where the attendant acts as trainer for his patient and makes no mistake about her being in "perfect trim" for the expected event.

The only pre-medication advisable for the healthy are those most effective of medicines—an adequate diet, a sufficiency of fresh air and light, and some gentle, regular exercise.

Puerperal infection so frequently begins with the labour that the rules, complete surgical asepsis, no unnecessary vaginal examinations and no interference without definite indications, should by now be superfluous, but I must repeat them, for all of us do not live up to all of them all of the time.

Haemorrhage at any stage of labour is rightly considered a serious matter, but, unknowingly, many permit a degree of it during the third stage of labour. This is unnecessary and debilitating. A properly conducted third stage should never weaken a patient. It is sound guidance to say, "Leave the baby to the nurse. She will be watching it, anyhow."

Lastly, a word about perineal tears. An inspection should be made of any perineal or vaginal injuries, and proper and complete repair is essential. Use extra coarse silkworm gut and sink it deep; add catgut, if necessary. The torn surfaces, mucous, muscular and skin, must be properly approximated; no pockets should remain, and haemostasis must be complete. The secret of successful perineal repair is to use a thick suture that will not cut, and to apply it just tight enough to produce the approximation and haemostasis necessary for healing by first intention.

If these principles have been practised, the pyrexial patient will be exceptional.

I have made a practice of considering certain cases as puerperal infections from the completion of labour. This group includes such misfortunes as the failed forceps case, much handled and badly lacerated; the blanched placenta praevia, where hasty version had to take pride of place to surgical cleanliness; and others likely to miss septicaemia only by good luck.

In such instances I advocate the immediate administration of anti-streptococcic (scarlet or puerperal) serum in a 25 cc. dose; smaller dosage is unsatisfactory. Where acute anaemia is present, blood transfusion should not be delayed. I am not satisfied that blood transfusion is beneficial in established sepsis, but given thus early it is invaluable. It is undoubted that these two steps have, time and again, avoided or greatly modified infections in highly suspect cases.

From the treatment of the established case of puerperal sepsis I have dropped the use of intravenous antiseptics, and have limited the application of intra-uterine glycerine. In the first instance, while I appreciated the logic of applying an antiseptic to the streptococcus in the blood stream, the results suggested either that the antiseptic was not doing its job properly or that it was interfering with the production or action of the natural defences. In the second case I found glycerine invaluable in the cleansing of a dirty uterine cavity, and every case admitted was investigated for possible retained products, had any gently removed by means of a gloved finger, and had glycerine and iodine left in the uterus. Very occasionally, if the lochia was foul and free, this was repeated once. I never could appreciate the point in the continuous application of glycerine to the uterus when the cavity was empty and clean, and where the infection had passed to the blood stream itself.

Here I would like to point out that, in dropping intravenous antiseptics, and in reducing the use of intra-uterine glycerine, I have had very much in mind the preservation of my patient's natural resistance. The former, I fear, inhibits defence; the latter necessitates repeated disturbance and exhaustion of the patient.

The prime requirements for the successful treatment of puerperal sepsis is the maintenance of a patient capable of resistance and defence. Skilled nursing day and night is essential. The room should be well aired, have maximum sunlight, and be only comfortably warm. The patient should be nursed sitting up, kept thoroughly comfortable and suffer only unavoidable disturbance. I prefer dry rubbing down at 101° to sponging later, as it maintains a steadier comfort and is less exhausting. The bed bath I deprecate, the enema syringe and the vaginal douche I keep for infrequent use—all because they take heavy toll on the strength of those who are seriously ill.

Food should be light, but sufficient. No attempt should be made at set meals—the best policy is to offer frequent tasty morsels. I never discourage milk chocolate or toffee, and the only fruit forbidden is the banana. One of the vitamin concentrates may be given with advantage.

Sleep is all important. Aspirin and Dover's powder, five grains each, given last thing at night, usually prove satisfactory.

Where subinvolution is a feature, pituitrin 0.5 cc., six hourly for two days, and quinine sulphate, grains three, t.d.s. for three days gives, as a rule, rapid shrinkage.

Douching, as indicated above, I have almost discarded. Once the uterus is cleaned out, the douche can become a source of danger. Vaginal and perineal lacerations and abrasions respond better to swabbing with saline or peroxide of hydrogen. When their toilet is complete, an "Iodex" pessary may be left in the vagina without disturbing the patient, as a douche would do, and without any risk of infected matter being washed from vagina into uterus.

I frankly admit that my faith is complete in anti-streptococcic serum, the puerperal or, preferably, the scarlet type. I do not think the available sera are within reasonable distance of those we will ultimately have, but they offer the best results yet obtained. I have found them superior to vaccines, and they are available without the delay inseparable from autogenous vaccine therapy. I have seen any number of cases with monumental rigors, a racing pulse rate, and a haemolitic streptococcus in the blood culture recover and go home well.

In established cases, be they apparently severe or hopefully mild, give serum immediately, and begin with a 25 cc. to a 50 cc. dose intramusclarly. Depending on the severity of the infection, repeat in doses of not less than 20 cc. daily or every second day till the fever settles or serum reaction is produced.

Surgical measures are not generally applicable in the home, so are not within the scope of this article, but they should be readily available if pelvic abscess or pelvic or general peritonitis present.

The routine I have described has given results which have been highly encouraging. While my faith in the value of serum is high, I would end on the factor which, I think, is all important if the serum is to be successful. The patient cures herself, the serum is but the stimulant. Aim from the first ante-natal meeting, till labour is complete, at keeping the patient robust, resistant and responsive. If she has to use these defences after labour, be guarded against over-energy in treatment. It is not infrequently the weight that tips the balance adversely.

COMMUNICABLE DISEASES REPORTED

Urban and Rural - May, 1936.

Occurring in the Municipalities of:

Measles: Total 650—Winnipeg 375, Lac du Bonnet 55, Portage la Prairie R. 46, Strathclair 29, St. Boniface 24, Portage la Priarie City 23, Lawrence 22, Norfolk North 16, St. Paul West 13, St. Vital 6, Ste. Rose du Lac 3, Brooklands 2, De Salaberry 2, Harrison 2, Kildonan West 2, Morton 2, Selkirk 2, Springfield 2, Cornwallis 1, Flin Flon 1, Hanover 1, Hillsburg 1, Kildonan Old 1, Killarney 1, Lorne 1, Shoal Lake R. 1, Ste. Rose R. 1, Turtle Mountain 1, Unorganized 1, Whitemouth 1, Late Reported: April, Flin Flon 9, St. Boniface 3.

Scarlet Fever: Total 225—Winnipeg 174, Kildonan West 8, St. Vital 5, St. Clements 4, Morden 4, Gretna 4, Gilbert Plains R. 2, Gimli R. 2, Lorne 2, Minitonas 2, Rhineland 2, Swan River Rural 2, Ste. Anne 2, St. Boniface 2, Brokenhead 1, Carman 1, Grey 1, Kildonan East 1, Montcalm 1, Ritchot 1, Russell R. 1, Rossell Town 1, Late Reported: April, St. Boniface 2.

Mumps: Total 136—Winnipeg 35, Binscarth 25, Russell R. 5, Shell River 5, Unorganized 4, Kildonan West 1, Louise 1, Roland 1, St. Boniface 1, St. James 1, Whitehead 1, Woodlands 1, Late Reported: April, Binscarth 50, Russell R. 5.

Chickenpox: Total 85—Winnipeg 44, St. Vital 15, St. Boniface 11, Brandon 2, Unorganized 1, Late Reported: April, St. Boniface 6, St. Vital 6.

German Measles: Total 80—Roland 26, Brandon 23, St. James 11, Louise 6, Rosser 6, Macdonald 2, Woodworth 2, Cornwallis 1, Kildonan West 1, St. Boniface 1, Rockwood 1.

Whooping Cough: Total 29—Winnipeg 25, Ste. Anne 2, Boulton 1, Portage la Prairie City 1.

Tuberculosis: Total 23—Winnipeg 9, De Salaberry 2, Louise 2, St. James 2, Unorganized 2, Brokenhead 1, Brooklands 1, Kildonan East 1, St. Boniface 1, St. Clements 1, Whitemouth 1.

Erysipelas: Total 12—Winnipeg 3, Louise 2, Edward 1, Grandview Town 1, Kildonan West 1, La Broquerie 1, Roland 1, St. Boniface 1, St. Vital 1.

Diphtheria: Total 9—Winnipeg 4, Charleswood 2, Ste. Anne 1, St. Clements 1, St. Francois Xavier 1.

Typhoid Fever: Total 4, Hanover 2, Selkirk 1, St. Francois Xavier 1.

Undulant Fever: Total 2—Charleswood 1, Late Reported: April, Transcona 1.

Trachoma: Total 2—Brandon 1, Brokenhead 1.

Puerperal Fever: Total 2—Hanover 1, Rockwood 1.

Septic Sore Throat: Total 1—Grandview Town 1.

Cerebrospinal Meningitis: Total 1: Montcalm 1.

Anterior Poliomyelitis: Total 1—Ochre River 1.

Venereal Disease: Total 120—Gonorrhoea 92, Syphilis 28.

DEATHS FROM ALL CAUSES IN MANITOBA

For the Month of May, 1936.

URBAN—Cancer 41, Pneumonia 14, Tuberculosis 13, Influenza 4, Measles 4, Syphilis 3, Typhoid 2, Lethargic Encephalitis 1, Epidemic Encephalitis 1, Erysipelas 1, all others under 1 year 1, all other causes 142, Stillbirths 16. Total 249.

RURAL—Pneumonia 28, Influenza 25, Cancer 17, Tuberculosis 12, Syphilis 2, Measles 1, Scarlet Fever 1, all others under 1 year 5, all other causes 142, Stillbirths 16. Total 249.

INDIAN—Tuberculosis 17, Pneumonia 3, Influenza 1, Syphilis 1, all other causes 8, Stillbirths 1. Total 31.

The Manitoba Medical Association Review

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Clinical Section

* Common Failures of Diagnosis in Medical Practice

By

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I do not deal here with failures of diagnosis in rare or recently described diseases. I have in mind only the failures you and I often make in not recognizing common diseases when we should do so. In introducing this subject for discussion, one may profitably try to analyse in a general way the reasons for such failure and so may sometimes prevent diagnostic errors in the future.

Insufficient care in the history taking and *insufficient care in the ordinary physical examination* are obviously responsible for the majority of such errors. The bedrock of diagnosis is now, and will remain, a careful history and a careful physical examination. The patient comes to us because he feels something wrong—he has certain symptoms; we so often do not take the necessary time and care to elicit the onset and progress of these symptoms.

We forget a clue may be given in the *family history* or in the patient's *previous illnesses.* In some families there is a history of repeated heart failure or of apoplexy; in others, of nervous disease or even of insanity; in still others tuberculosis, pernicious anaemia, goitre or migraine may be present. The general build and weight of the parents may have a bearing.

The *previous history of the patient is time-consuming,* yet we must let the patient tell it in his own way, directing merely the flow of talk but avoiding leading questions. As I get older, I take more time in history taking; in so many diseases the whole diagnosis lies in the history. Think how often the physical examination, however careful, may be negative, yet the history may unmistakably reveal angina pectoris, peptic ulcer, gall bladder colic, renal calculus, beginning stenosis of the large bowel, migraine, increased intracranial pressure. Remember how an almost forgotten attack, years ago, of severe epigastric pain followed by jaundice may clear up the diagnosis of an obscure dyspepsia; remember how a trivial and unconsidered injury to the head in falling—too unimportant, apparently, to be mentioned without direct enquiry—may weeks later in subdural haemorrhage give rise to otherwise inexplicable nervous symptoms, demanding immediate operation. Quite apart from the obvious benefit to our patients—the main consideration—we should surely find a deep satisfaction in trying from the history alone to form a tentative diagnosis—we should as the history proceeds, pass in review the possibilities, discarding some, probing by skilful questioning, other possibilities. We miss the keenest pleasures of our calling if we do not adopt *the detective attitude* in our history taking—and our mistakes in diagnosis multiply.

Like any worth-while pursuit, *history taking improves with practice,* as any one of you can readily verify by turning up your old case records.

May I suggest that in general practice too often *the physician has no general history of his patient*—he has notes only of the individual special ailments for which he has attended. It would prevent many a mistake were the rule adopted deliberately by the general practitioner on some occasion, *early in the attendance, to get a careful previous history* of his patient and duly record this in writing.

Previous operations, especially a b d o m i n a l though sometimes on the breast, should be carefully enquired into. The recent change of heart of leading surgeons in regard to operation in cholecystitis further illustrates the importance of a careful history—even in undoubted cholecystitis, to operate only where there is a clear-cut history of recurring attacks of colic.

During the history taking *we size up what manner of man* our patient is; we all *form unconsciously a general impression of our patient,* which is very valuable, but this should be *supplemented by a deliberate and conscious survey.* We note the highly strung individual as contrasted with the placid, easy-going type and we instinctively feel that behind the latter's complaints, organic disease is usually to be found while the former's symptoms may possibly enough be nervous in origin. *The build of the patient* often gives us a clue; the long narrow chest with sagging organs is much more often associated with functional abdominal complaints than when the patient has a broad chest with the abdominal organs slung high. In our general survey, one often gets a hint which we may miss in the detailed examination to follow. Exophthalmic goitre, myxoedema or other endocrine disturbance may be apparent at a glance or may, at least, be suspected. The curious lemon tint so often seen in pernicious anaemia contrasts at once with the pallor of secondary anaemia and with the grayer tint of malignant disease. Slight juandice otherwise unnoticed may be apparent. The fixed unwinking expression may betray an old attack of encephalitis or a beginning paralysis agitans.

We insist on the importance of the general inspection of the patient because of the *tendency to begin immediately to examine the part of the body to which symptoms are referred.* So we far

* Read at the Annual Meeting of the Manitoba Medical Association, Winnipeg, May, 1936.

too often ignore a tendency to *overweight* and overlook entirely the serious consequences of obesity in middle and advanced age. Life insurance statistics show that at 40, 15% overweight increases the mortality 10%, while 30% overweight increases it by 40%. Imagine a condition amenable to surgery which shortened the span of life so greatly and consider what a rush there would be to operation. Nor does the shortening of life expectancy tell the whole tale against obesity. The efficiency and comfort of the individual is so often greatly impaired. Diabetes, degenerative disease of the cardiovascular system, gall stones, hernia, diverticulitis, bronchitis, osteoarthritis and myalgia are all more common in obese subjects, while the death rate from operation is increased. There is the less excuse for our failure to recognize and treat obesity because the dietetic treatment is now quite standardized on a rational basis.

From the general survey we pass to the *general examination.* In but few medical diseases, is it safe to make a purely local examination. *Strip the patient* and make a general examination. The general practitioner should have a definite record of such an examination at least once thoroughly made, and with patients seen casually a fertile source of error is the absence of a general examination. *I pass in rapid review the most common omissions,* as I see it, *in our examinations.*

We *often are not systematic* and *do not deliberately consider all the systems.* We are prone to forget the *endocrine system* and should make a point somewhere in our examination to include it. The *spine* is too often forgotten and yet may explain puzzling pains referred to the abdomen; its mobility should be tested. *Rectal examination* is often overlooked; an unexplained anaemia may be due to overlooked haemorrhoids but still more often the *patient's diagnosis of haemorrhoids* is accepted too readily; malignancy of bowel, secondary deposits in Douglas' pouch, inflammatory pelvic masses, ischio rectal fistula and prostatic disease—all conditions often recognizable if one but examine with the finger—are unpardonably overlooked. The *condition of the reflexes,* especially the knee jerk, the light reflex in the eye, the abdominal reflexes, and the sole response are too often forgotten; the investigation of the *circulation in the lower extremities* is but seldom seriously considered and yet may explain some puzzling pains in the legs and feet. The subcutaneous *glands* should be rapidly palpated—often the discovery of hitherto unnoted glands may give the diagnosis of Hodgkin's disease or of leucaemia or of malignancy. It takes but a moment to palpate for *enlarged spleen,* a finding which may greatly aid in the diagnosis of subacute bacterial endocarditis or leucaemia and may exclude a diagnosis of malignancy, otherwise probable.

We should examine with special care the part of the body to which the patient refers his symptoms. Microscopic examination of the centrifuged urine should be part of every thorough examination; again and again, the discovery of pus or blood in the urine clears up an otherwise obscure diagnosis. I need not remind you that even the grosser error of overlooking sugar or albumen is not so exceptional.

The presence of myalgia of the abdominal wall is still apt to be overlooked and misinterpreted.

High blood pressure is often diagnosed erroneously—the mere rise of systolic pressure even to a considerable height, say 160 to 180, does not justify the diagnosis of essential hypertension, if the diastolic pressure is below 90 or possibly, at times, even below 100. The diastolic blood pressure should be taken sytematically, for on its rise mainly depends the strain on the cardiovascular system and so the prognosis. A high systolic, combined with a low diastolic, blood pressure, suggests exophthalmic goitre, aortic regurgitation, arteriosclerosis of the aorta sometimes merely a passing nervousness.

Should the physical examination show definite organic disease, *do not assume at once that any, or all, of the symptoms complained of are necessarily due to the organic disease present.* If a patient knows or suspects that there is something physically wrong, the doubt and fear engendered will often provoke emotional reactions in the shape of bodily symptoms. Thus a rapid heart or precordial pain is often the patient's emotional response to an innocent systolic murmur or to a mitral stenosis, requiring over long years no special treatment.

Not the disease alone, which we recognize is important, but the patient's reaction to that disease. It is *often much more important to know what sort of patient has a disease* than *what sort of disease the patient has.* The disappearance of symptoms associated with, but not due to, organic disease under Christian Science or at the hands of osteopaths or chiropractors, illustrates the same point. And in passing, be it hinted many of the cures of surgery depend on the same overlooked mental factor. It is so often not the disease but the patient's absurd notions about that disease, which determine the symptoms complained of. In distinguishing how much is due to organic disease, how much to an accompanying nervous element, no rules are provided for our guidance—the *practitioner's judgment after a general survey must decide* for the individual case and prolonged observation may be necessary to correct the original impression.

In other cases, neither the history nor the careful physical examination may show any definite indication of organic disease; this is a common enough situation for general practitioner and internist alike. Here we have to *decide whether special examinations are necessary*—x-ray, blood count, cardiogram, basal metabolic rate, Wasserman test, blood urea or special blood determination as of blood calcium, etc. In these days of economic stress, particularly, *unnecessary expensive examinations must be avoided.* A careful

history and a careful physical examination, including a size-up of the "man above the eyebrows," often make us reasonably certain that there is no organic disease. The *general practitioner has the great advantage of knowing his patients*: the hereditary influences, the home upbringing, the domestic happiness, the business worries, unemployment and thwarted ambition, habits in regard to exercise, alcohol, tobacco and sex—all the factors influencing the well bearing of the patient are often open to the family doctor if he but care to study the human comedy or tragedy enacted in the home with sympathetic insight. We all recognize that anger or sudden disappointment may temporarily increase the heart rate, may cause nausea and loss of appetite —but we *forget that fears and worries—the baffling situations in which so many find themselves in these days of economic stress and unemployment—may chronically stimulate the autonomic system and give rise to dyspeptic, circulatory or nervous symptoms.* We are too apt to assume that local symptoms must have purely local causes.

I come now to the *use and abuse of special examinations.* Only *after we have studied our patient*—his history, his general physical examination, his possible reactions to the problems of life, reactions conditioned by his individual make up—*should we consider special examinations* and order them, if we think it necessary or worthwhile in the full light of our knowledge, acquired by the old established methods.

It is common enough at present *to order an x-ray* of the gastro-intestinal tract, a gall bladder visualization or a cardiogram after *the most perfunctory history* and physical examination and to be guided in our diagnosis by the results of the special examinations. *We exalt our servants into the master's seat.* The *results of our special examinations should be integrated and interpreted in the light* of our *previous knowledge of the patient.* With our personal knowledge, we may not infrequently question the opinion given by x-ray examination or blood report and demand a re-check. We forget *how very human and liable to error are even the best of technicians, the best of specialists*—the apparent certainty of the report imposes unduly. The *physician alone must decide how applicable the changes indicated* in x-ray, metabolic test or cardiogram are to the clinical picture.

It does not help the patient to remove a definitely diseased gall bladder or even gall stones if the dyspepsia for which he consulted the physician is due to coronary thrombosis or to renal insufficiency. Prominent surgeons everywhere have recently emphasised the sources of failure in their results and emphasize as never before that the analysis of symptoms is decisive.

Many errors can be avoided if we study the x-ray findings in the light of the history and physical examination especially if we have indicated our suspicions or actual tentative diagnosis before the x-ray is begun. Such a hint puts the roentgenologist particularly on his guard to avoid missing the suspected lesion.

A few special comments may be permissible:

Not sufficient use is made of the diascope of the chest — tuberculosis, secondary malignancy, bronchial carcinoma, Hodgkin's disease, aneurysm, etc., may be obvious at a glance. *Cardiospasm* may occur at any age and is too often regarded as malignant disease of the osteophagus . . . a mistake usually readily avoidable by a satisfactory x-ray. *Carcinoma of the stomach* is so insidious that we must specially consider it, not only in obstinate dyspepsia but in unaccountable loss of strength and weight or marked anæmia in middle or advanced life. It may be *quite impossible to distinguish between pernicious anaemia and carcinoma of the stomach* apart from a careful x-ray.

At present, *duodenal ulcer* is *not infrequently diagnosed erroneously* by the roentgenologist or on the other hand is missed.

In recently developed constipation at middle age, especially if associated with colic-like pains, *a barium enema should be earlier resorted to than at present,* to exclude carcinoma of the colon, while diverticulitis is forgotten though common enough in stout middle-aged men—the hard, fixed *tumour of diverticulitis* may even at operation be mistaken by the surgeon for carcinoma.

The *x-ray examination of the gall bladder,* following dye taken the previous evening, is wonderfully accurate, if a satisfactory technic be followed, though, even so, some 10% of patients with a normal gall bladder shadow have either definite cholecystitis or gall stones. In doubtful cases a repetition of the test is advisable.

But it is all too often forgotten that definite disease of the gall bladder eventually occurs in 40% of the adult population, half of these having gall stones. It is the duty of the physician to decide, by a careful review of the history, whether in the individual case, the undoubted biliary pathology is responsible for the symptoms complained of. It is a poor consolation for the patient, whose original symptoms were due possibly to angina pectoris, to surgical disease of the right kidney or to spastic colon, to be assured that the gall bladder removed was really diseased.

Especially carefully must the physician decide whether the patient be suffering from angina pectoris or coronary occlusion or from gall bladder disease—or possibly from both conditions. Again be it emphasized that even obstinate gassy dyspepsia plus a functionless gall bladder but without a history of biliary colic, is relieved only in 50% of cases by cholecystectomy.

Whenever possible, the physician should make a point of seeing the x-rays of his patient and should discuss with the roentgenologist any difficulties in reconciling the x-ray findings with the clinical picture. The physician does well to take a general survey of the films; frequently

enough, unexpected abnormalities (e.g. of the bones) may give a clue to a hitherto obscure diagnosis.

Basal Metabolic Tests: The value of a basal metabolic reading under proper conditions is undoubted; the value of a metabolic reading obtained down town in actual practice is limited, while the readings in the hospital are definitely much more reliable. This means much more care will have to be given to the performance of these tests in future; at present, the basal metabolic tests give frequently results at variance with the clinical picture revealed by a careful history and physical examination. But a test which is accepted only when it fits in with the clinical picture and is ignored when it does not, is not very satisfactory and this is roughly the present status of metabolic tests, performed down town, in my judgment. I rely on these tests, so performed, very little, though a repetition of the test heightens its value—low rates are, of course, more reliable than high rates.

Blood Examinations: The younger generation should train themselves to do blood counts systematically. A reliable leucocyte count is so very frequenty of value that it is well worth while for the general practitioner early in his career to practice assiduously blood counts. The extraordinary success of the treatment of pernicious anaemia and the hardly less dramatic improvement in our treatment of microcytic anaemia nowadays make an early and exact diagnosis imperative. Pernicious anaemia, especially, is not taken into account as it might be.

A Blood Urea Estimation is one of the tests which must be remembered. Thrice since I undertook this paper, a high blood urea cleared up the diagnosis of a case, till then obscure.

A Test Meal: A test meal in all cases of obstinate dyspepsia should be resorted to; the general practitioner forgets that from the study of gastric contents recovered—whether well or poorly digested, whether much mucus is present or not, whether blue litmus is changed or Congo paper turned blue—he can get most of the information he needs in the average case without any chemical tests. This does not imply that the presence of pus microscopically or of blood chemically or that the exact amount of free hydrochloric acid present is not valuable; this additional information may be of great service but in the average case, the simple inspection with the use of blue litmus and Congo paper is so frequently sufficient.

Fundus examination: The electric ophthalmoscope is so easy to manipulate that there is little excuse for the younger practitioners at least, not to be reasonably adept in its use. Every case of obstinate headache should be examined for possible optic neuritis or choked disc, yet even now this precaution is all too often overlooked. The condition of the arteries in Essential Hypertension, the changes in the fundus in chronic renal disease and in blood dyscrasias may give an early hint of the diagnosis. The striking pallor of the outer halves of the discs with associated narrowing of the arteries may indicate Disseminated Sclerosis—a condition too often mistaken for functional nervous disease, in spite, too, of the tell-tale extensor response, generally present.

In all obscure disease, *Syphilis* should be considered and a *Blood Wassermann* Test should be obtained. There is no doubt this test is too frequently forgotten.

The *Electrocardiogram* is sometimes essential to make an exact diagnosis, especially of coronary thrombosis v. an abdominal catastrophe, or of a doubtful arrhythmia; it is valuable too, when the diagnosis of angina pectoris is in doubt or when obscure cardiac symptoms develop in middle-aged and elderly people; in well-to-do older patients, it is well worth while having a cardiogram in every case. But its value in diagnosis and especially in prognosis has been much exaggerated in certain quarters; the cardiogram is only one of many factors which have to be considered; the general sizing up of the patient, the careful history, the development of symptoms and the ordinary physical examination will, in most cardiac cases, supply the general practitioner with all the information in regard to prognosis and treatment he requires. For Life Insurance Companies, who cannot rely on obtaining a frank and honest personal history in many cases and who are naturally interested in determining prognosis of large numbers rather than of an individual patient, the Cardiogram has legitimately a wider field of usefulness. So that while the younger practitioner should familiarize himself with Cardiographic findings, which are only exceptionally difficult to interpret, he should remember that the general diagnosis and prognosis of myocardial disease still rest with him and the ordinary methods of examination.

In all chronic cases where the diagnosis is in doubt and in acute disease with developing symptoms, one should deliberately *analyze the case afresh from time to time,* trying to view the history and renewed physical examination with unprejudiced eyes. It is difficult, in attendance on a patient, to divest oneself of leanings to some diagnosis, made in the early stages, even when the later symptoms point unmistakeably to another and obvious solution of the medical problem. Every consultant will bear witness to the truth of this statement.

Lastly, I can but mention the importance of *attendance on operations and post mortems* of patients in whom we are interested, or when this is not possible, of ascertaining accurately the operative or post mortem findings and reviewing the whole case in the light of such authoritative information.

In reference to the News Items published in the July issue of the Review, entitled "My Method in Puerperal Infection," this paper was not written by any member of the Department of Health and Public Welfare, but was taken verbatim from one of the many publications coming into the Department, so it should not be taken to represent the considered opinion of members of the Department in reference to the proper method of treating puerperal infection. —F.W.J.

The Canada Year Book

The publication of the 1936 edition of the Canada Year Book is announced by the General Statistics Branch of the Dominion Bureau of Statistics. The Canada Year Book is the official statistical annual of the country and contains a thoroughly up-to-date account of the natural resources of the Dominion and their development, the history of the country, its institutions, its demography, the different branches of production, trade, transportation, finance, education, etc.—in brief, a comprehensive study within the limits of a single volume of the social and economic condition of the Dominion. This new edition has been thoroughly revised throughout and includes in all its chapters the latest information available up to the date of going to press.

The 1936 Canada Year Book extends to over 1,150 pages, dealing with every phase of the national life and more especially with those susceptible of statistical measurement. Attention may be called to some of the special features of the present volume. The statistical summary, included in the introductory matter, has been extended this year. A special article, "Canada on Vimy Ridge," prepared by Colonel A. Fortescue Duguid, D.S.O., B.Sc., R.C.A., Director of the Historical Section (G.S.), Department of National Defence, has been included in Chapter II. New material on fertility rates and multiple births in Canada has been added to Chapter V. The introduction to the External Trade Chapter (XVI) has been revised by the inclusion of an abstract of the value and quantum of world trade abridged from the League of Nations' "Review of World Trade, 1934." There is included new material on the important subject of municipal taxation and the estimate of national wealth, 1933, with revised comparable figures for 1929—the latter estimate gives a picture at the peak of domestic prosperity while the 1933 figures reflect the writing down of values resulting from the depression. Improvement has been affected in the presentation of the financial statistics of the provincially-controlled schools of Canada by the collection of data on a more comparable basis from all provinces. Sections dealing with the public health activities of Dominion and of provincial health authorities and a brief sketch of the origin and growth of the different classes of institutions in Canada have been included.

The death of His Majesty King George V. on January 20, 1936, received with deep sorrow throughout the Empire and with world-wide regret, and the succession of King Edward VIII. to the Throne, have been appropriately marked by the reproduction, as frontispiece, of the official Proclamation of the Government of Canada made on January 21, 1936, accompanied by the latest official photographs, obtained through the courtesy of the respective Court photographers.

The Volume is illustrated by many maps and diagrams and the latest available data are everywhere included.

Owing to the urgent need for economy in the distribution of Government publications, it has become necessary to make a charge to all individuals receiving the Canada Year Book. Persons requiring the Year Book may obtain it from the King's Printer, Ottawa, as long as the supply lasts, at the price of $1.50, which covers merely the cost of paper, printing and binding. By a special concession, ministers of religion, bona-fide students and school teachers may obtain paper-bound copies at the nominal price of 50c each.